

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for aligning in at least one of time and space temporally ordered sequences of images comprising:

receiving a plurality of sequences of images, each sequence containing a multiplicity of images, each of said plurality of sequences defining a space-time volume, without requiring that images in said plurality of sequences be coincident in time; and

providing an output indication relating at least one point in a space-time volume corresponding to one of said plurality of sequences to at least one point in a space-time volume corresponding to at least another one of said plurality of sequences.

2. (Original) A method for aligning according to claim 1 and wherein said providing an output indication comprises:

finding at least one global alignment in at least one of time and space between at least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment matches spatial-temporal variations occurring at plural locations in said first space-time volume to spatial-temporal variations occurring at plural locations in said second space-time volume.

3. (Original) A method for aligning according to claim 1 and wherein said providing an output indication comprises:

finding at least one global alignment in at least one of time and space between at least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment correlates spatial-temporal variations occurring at plural locations in said first space-time volume to spatial-temporal variations occurring at plural locations in said second space-time volume.

4. (Original) A method for aligning according to claim 1 and wherein said providing an output indication comprises:

finding at least one global alignment in at least one of time and space between at

least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment matches at least temporal variations occurring at plural locations in said first space-time volume to at least temporal variations occurring at plural locations in said second space-time volume.

5. (Original) A method for aligning according to claim 1 and wherein said providing an output indication comprises:

finding at least one global alignment in at least one of time and space between at least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment correlates at least temporal variations occurring at plural locations in said first space-time volume to at least temporal variations occurring at plural locations in said second space-time volume.

6. (Original) A method according to claim 2 wherein said step of finding at least one global alignment in at least one of time and space comprises finding at least one global alignment in time.

7. (Original) A method according to claim 2 wherein said step of finding at least one global alignment in at least one of time and space comprises finding at least one global alignment in space.

8. (Currently Amended) A system for aligning in at least one of time and space temporally ordered sequences of images comprising:

a space-time volume generator, receiving a plurality of sequences of images, each sequence containing a multiplicity of images, each of said plurality of sequences defining a space-time volume, without requiring that images in said plurality of sequences be coincident in time; and

an aligner, providing an output indication relating at least one point in a space-time volume corresponding to one of said plurality of sequences to at least one point in a space-time volume corresponding to at least another one of said plurality of sequences.

9. (Original) A system for aligning according to claim 8 and wherein said aligner comprises a match-based global alignment finder, finding at least one global alignment in at least one of time and space between at least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment matches spatial-temporal variations occurring at plural locations in said first space-time volume to spatial-temporal variations occurring at plural locations in said second space-time volume.

10. (Original) A system for aligning according to claim 8 and wherein said aligner comprises a correlation-based global alignment finder, finding at least one global alignment in at least one of time and space between at least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment correlates spatial-temporal variations occurring at plural locations in said first space-time volume to spatial-temporal variations occurring at plural locations in said second space-time volume.

11. (Original) A system for aligning according to claim 8 and wherein said aligner comprises a match-based global alignment finder, finding at least one global alignment in at least one of time and space between at least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment matches at least temporal variations occurring at plural locations in said first space-time volume to spatial-temporal variations occurring at plural locations in said second space-time volume.

12. (Original) A system for aligning according to claim 8 and wherein said aligner comprises a correlation-based global alignment finder, finding at least one global alignment in at least one of time and space between at least a portion of a first space-time volume corresponding to one of said plurality of sequences and at least a portion of a second space-

time volume corresponding to at least another one of said plurality of sequences, which said at least one global alignment correlates at least temporal variations occurring at plural locations in said first space-time volume to spatial-temporal variations occurring at plural locations in said second space-time volume.

13. (Original) A method according to claim 1 wherein said images comprise color images.

14. (New) A method according to claim 1 and wherein said at least one point in a space-time volume comprises at least one of a point in a sub-frame unit and a point in a sub-pixel unit.

15. (New) A system for aligning according to claim 8 and wherein said at least one point in a space-time volume comprises at least one of a point in a sub-frame unit and a point in a sub-pixel unit.

16. (New) A method according to claim 4 and wherein said temporal variations result from at least one of said sequences being at different frame rates, said sequences having a time shift therebetween and said sequences having a shift at sub-frame units.

17. (New) A method according to claim 5 and wherein said temporal variations result from at least one of said sequences being at different frame rates, said sequences having a time shift therebetween and said sequences having a shift at sub-frame units.

18. (New) A system for aligning according to claim 11 and wherein said temporal variations result from at least one of said sequences being at different frame rates, said sequences having a time shift therebetween and said sequences having a shift at sub-frame units.

19. (New) A system for aligning according to claim 12 and wherein said temporal variations result from at least one of said sequences being at different frame rates, said sequences having a time shift therebetween and said sequences having a shift at sub-frame units.